CLEAN COPY OF CLAIM AS AMENDED

IN THE CLAIMS:

- 30. A method of controlling temperature profile in a recovery boiler, the method including the steps of:
 - a) supplying oxygen flows to at least two air injection levels of the recovery boiler, the two air injection levels being different from the primary air injection level, for oxygen enrichment of the two air injection levels;
 - b) selecting a set point temperature profile;
 - c) sensing average temperatures at different levels of the boiler with an optical technique, and inferring a temperature profile to the boiler, adjusting the oxygen flow injected in the at least two air injection levels so that the measured temperature profile matches the boiler set point temperature profile.